Abstract

Intermountain Power Service Corporation (IPSC) operates the Intermountain Generating Station (IGS) coal fired steam-electric plant, consisting of two 875 MW units, located near Delta in Millard County. IPSC is requesting a modification to their current approval order (AO) DAQE-749-01 to uprate (increase) each unit's generating capacity from 875 to 950 MW. The following are the modifications needed at the plant for the proposed-uprate which will affect emissions:

1. Increase heat input through the main boilers
2. Add patented scrubber wall rings to provide more efficient SO_2 removal
3. Add more rows of tubes in the boiler super heating section

There will be other changes which will not directly affect emissions, such as:

1. Replacement of two existing high pressure turbines with two current technology and high efficiency turbines
2. Replace one existing relief valve with safety valve on each boiler, add one new helper cooling tower (for each unit) without increasing current total circulating flow rates and cycles of concentration, boiler feed pump performance upgrade, generator and isophase cooling enhancement, and other similar changes
3. Substituting emission rate limit of 0.024 grains per dry standard cubic feet for the Group I dust collectors with an alternate limit: monthly monitoring of a differential pressure across the dust collectors.
4. In addition to the requested changes, existing emissions from the existing cooling towers were added to the plant potential to emit.

Millard County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS), Subpart Da and Subpart Y applies to this source. Boiler 1 & 2 are also Group 1, Phase II units under the Acid Rain Program. IPSC is a major source of NO_x, SO_2, CO, and PM_{10}. Title V of the 1990 Clean Air Act applies to this source. The Title V permit will be administratively amended after this AO has been issued.
The emissions, in tons per year, will change as follows: PM_{10} (+9.75), CO (+ 77.56), VOC (+ 0.69), HAPs (VOC and Non-VOC) (+1.12).

This modification did not trigger Prevention of Significant Deterioration (PSD) regulation review since the emission increases (based on base line actual emissions and projected future emissions) were below significant levels. However, IPSC will monitor and maintain post change emissions information and submit them to the Utah Division of Air Quality on an annual basis for a period of 5 years to demonstrate that this modification did not result in a significant emissions increase. If the submitted information indicates that emissions have increased as a consequence of the proposed change, at that time IPSC will be required to obtain a PSD permit.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Executive Secretary of the Utah Air Quality Board.

A public comment period will be held in accordance with UAC R307-401-4. A NOI to approve will be published in the?????????????? on ????????, 2001. During the public comment period the proposal and